

WHAT IS CLAIMED IS:

1. An apparatus for use in welding of a seat back frame, said seat back frame including side frame sections, on lower portions of which first and second locking means for a reclining mechanism are provided, said first and second locking means including first and second actuating shafts which penetrate said side frame sections and project inward of said seat back frame so as to be aligned with each other, said first and second actuating shafts being coupled to each other through a supporting shaft, one of said first and second actuating shafts having an deformed end portion, said supporting shaft having first and second end portions, one of said first and second end portions of said supporting shaft having opposed deformed peripheral wall portions, the one of said first and second end portions of said supporting shaft being coupled to said deformed end portion of the one of said first and second actuating shafts so as to be rotatable relative to the one of said first and second actuating shafts at an angle of a few degrees, and the other of said first and second end portions of said supporting shaft being coupled to the other of said first and second actuating shafts and rigidly welded to the other of said first and second actuating shafts,

said apparatus comprising:

a receiving base for allowing said seat back frame to be carried thereon in a laid state and adapted for serving as a base of said apparatus;

first setting means mounted on said receiving base for positioning and holding said seat back frame carried on said receiving base;

second setting means for clamping and holding said supporting shaft coupled to said first and second actuating shafts of said first and second locking means provided at said seat back frame;

stand bases mounted on said receiving base for supporting said second setting means in such a manner that said second setting means can be swung relative to said stand bases; and

a first driving cylinder mounted on said receiving base and coupled to said second setting means for causing said second setting means to be swung relative to said stand bases prior to the welding of the other of said first and second end portions of said supporting shaft to the other of said first and second actuating shafts;

said first driving cylinder being adapted to develop a force to the extent that said supporting shaft held by said second setting means is rotated relative to said first and second actuating shafts of said first and second locking means provided at said seat back frame but said first and second actuating shafts are not rotated, when said first driving cylinder causes said second setting means to be swung, so that when said second setting means having clamped and held said supporting shaft is swung in a predetermined direction by said first driving cylinder, said supporting shaft is rotated by an allowed rotational amount relative to said first and second actuating shafts in a direction opposite to such a direction that said supporting shaft is shifted from a predetermined engaged point between said supporting shaft and said deformed end portion of the one of said first and second actuating shafts, whereby the one of said first and second end portions of said supporting shaft can be normally engaged with said deformed end portion of the one of said first and second actuating shafts at said predetermined engaged position prior to the welding of the other of said first and second actuating shafts to the other of said first and second actuating shafts.

2. An apparatus for use in welding of a seat back frame according to Claim 1 wherein said first setting means comprises a plurality of clampers for clamping and holding said seat back frame on said receiving base from a periphery of said seat back frame.

3. An apparatus for use in welding of a seat back frame according to Claim 1 wherein said second setting means comprises a supporting base having a step portion which comprises a vertical surface and a horizontal

surface, an axis of said supporting shaft being adapted to be received by said vertical and horizontal surfaces; and a second driving cylinder for pressing said axis of said supporting shaft against said vertical surface of said supporting base, said second driving cylinder being provided integrally with said supporting base.

4. An apparatus for use in welding of a seat back frame according to Claim 3 wherein said supporting base has supporting pins projecting from sides thereof, wherein said stand bases have circular-arc shaped guide grooves formed in sides thereof, said supporting pins of said supporting base being received in said guide grooves of said stand bases so as to be slid along said guide grooves, whereby said second setting means having held said axis of said supporting shaft can be swung, and wherein said first driving cylinder which generates the force to the extent that said supporting shaft is rotated relative to said first and second actuating shafts but said first and second actuating shafts are not rotated is provided between said supporting base and said receiving base.